

WHAT IS CLAIMED IS:

1. A method for forming an electrical interconnect on an integrated lead suspension or suspension component of the type having a spring metal layer, a conductive lead layer and an insulating layer separating portions of the spring metal and conductive lead layers, including:

forming an aperture through at least the insulating layer and exposing the spring metal layer at an interconnect site;
applying an interconnect mask around the interconnect site;
electroplating conductive material on the spring metal layer at the interconnect site to form a plated interconnect; and
removing the interconnect mask.

2. The method of claim 1 and further including electroplating the plated interconnect.

3. The method of claim 2 wherein electroplating the plated interconnect includes electroplating the plated interconnect with non-corrosive metal.

4. The method of claim 2 wherein electroplating the plated interconnect includes electroplating the plated interconnect with gold.

5. The method of claim 1 wherein electroplating conductive material includes forming a plated nickel or nickel alloy interconnect.

6. The method of claim 1 for forming a bond pad interconnect.

7. The method of claim 1 wherein:

forming an aperture includes forming an aperture through the insulator layer and at least one of the spring metal layer and conductive lead layer to expose portions of the spring metal and conductive lead layers at the interconnect site; and electroplating conductive material includes electroplating conductive material on the spring metal layer at the interconnect site to form an electrical interconnect between the spring metal layer and the conductive lead layer.

8. The method of claim 7 wherein electroplating conductive material on the spring metal layer includes building up conductive material on the spring metal layer through its electroplating onto the conductive lead layer at the interconnect site.

9. The method of claim 8 wherein:
forming an aperture includes forming an aperture through the insulator layer and the spring metal layer; and
electroplating conductive material includes forming a spring metal side interconnect.

10. The method of claim 8 and further including electroplating conductive metal on exposed portions of the conductive lead layer at the interconnect site before forming the spring metal side contact.

11. The method of claim 8 wherein:
forming an aperture includes forming an aperture through the insulator layer and the conductive lead layer; and
electroplating conductive material includes forming a conductive lead side interconnect.

12. The method of claim 1 and further including removing oxide from exposed portions of the spring metal layer at the interconnect site before electroplating conductive material to form the plated interconnect.

13. The method of claim 12 wherein removing oxide includes:
exposing the interconnect site to a plating metal bath; and
applying current to the interconnect site to perform an anodic clean.

14. A method for forming a bond pad interconnect on a spring metal layer of an integrated lead suspension or suspension component of the type also having a conductive lead layer separated from the spring metal layer by an insulator layer, including:
masking a bond pad interconnect site on the spring metal layer; and
electroplating conductive material on the spring metal layer at the interconnect site to form a bond pad interconnect.

15. The method of claim 14 wherein electroplating conductive material includes electroplating conductive material on the same side of the spring metal layer as the conductive lead layer to the height of the conductive material layer.

16. A method for forming a spring metal side interconnect between a spring metal layer and a conductive lead layer of an integrated lead suspension or suspension component of the type also having an insulator layer between the spring metal and conductive lead layers, including:

forming an aperture through the spring metal and insulator layers to expose the conductive lead layer at the interconnect site;
masking the interconnect site; and
electroplating conductive material onto the spring metal layer and building up the conductive material through its electroplating onto the conductive lead layer to form an electrical interconnect at the interconnect site.

17. A method for forming a conductive lead side interconnect between a spring metal layer and a conductive lead layer of an integrated lead suspension or suspension component of the type also having an insulator layer between the spring metal and conductive lead layers, including:

forming an aperture through the conductive lead and insulator layers to expose the spring metal layer at the interconnect site;
masking the interconnect site; and
electroplating conductive material onto the spring metal layer and building up the conductive material through its electroplating onto the conductive lead layer to form an electrical interconnect at the interconnect site.

18. In an integrated lead suspension or suspension component of the type having a conductive spring metal layer, a conductive lead layer and an insulator layer between at least portions of the spring metal and conductive lead layers, an electrical interconnect between the spring metal and conductive lead layers, including:

an aperture through the insulator layer and at least one of the spring metal and conductive lead layers at an interconnect site; and
an electroplated conductive material interconnect extending between both the spring metal layer and the conductive lead layer at the interconnect site.

19. The electrical interconnect of claim 18 wherein:

the aperture includes an aperture through the spring metal and insulator layers exposing an interior surface of the conductive lead layer at the interconnect site; and

the electroplated interconnect includes conductive material plated over the spring metal layer and built up to extend into plated electrical contact with the interior surface layer of the conductive lead layer at the interconnect site.

20. The electrical interconnect of claim 18 wherein:

the aperture includes an aperture through the conductive lead and insulator layers exposing an interior surface of the spring metal layer at the interconnect site;
and

the electroplated interconnect includes conductive material interconnect plated over the interior surface of the spring metal layer and built up to extend into plated electrical contact with the conductive lead layer at the interconnect site.

21. In an integrated lead suspension or suspension component of the type having a conductive spring metal layer, a conductive lead layer and an insulator layer between at least portions of the spring metal and conductive lead layers, an electrical bond pad interconnect including an electroplated conductive material pad on the spring metal layer at an interconnect site.

22. The bond pad interconnect of claim 21, wherein the conductive material pad is built up on the same side of the spring metal layer as the conductive lead layer and to a height generally equal to a height of the conductive lead layer.